```
=> File .Biotech
=> S (N-formyl-methionyl(w)peptide or F-Met-X)
L1          23 (N-FORMYL-METHIONYL(W) PEPTIDE OR F-MET-X)

=> s (N-formyl-methionyl-leucyl or F-Met-Leu)
L2        7553 (N-FORMYL-METHIONYL-LEUCYL OR F-MET-LEU)

=> s l2 and (F-Met-Leu-X)
L3          17 L2 AND (F-MET-LEU-X)

=> s l1 and l3
L4           0 L1 AND L3

=> s l1 and (Immunoglobulin E or IgE)
L5           1 L1 AND (IMMUNOGLOBULIN E OR IGE)

=> d l5 bib ab

L5   ANSWER 1 OF 1  USPATFULL on STN
AN     2003:106902  USPATFULL
TI     Adrenic acid receptor and uses thereof
IN     Rebas, Nicola M., Sandwich, UNITED KINGDOM
PI     US 2003073815      A1   20030417
AI     US 2002-219113     A1   20020815 (10)
PRAI   GB 2001-19928       20010815
       US 2001-317812P     20010906 (60)
DT     Utility
FS     APPLICATION
LREP   PFIZER INC., PATENT DEPARTMENT, MS8260-1611, EASTERN POINT ROAD, GROTON,
       CT, 06340
CLMN   Number of Claims: 21
ECL    Exemplary Claim: 1
DRWN   1 Drawing Page(s)
LN.CNT 1731
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     This invention relates to the identification of an orphan G-protein
       coupled receptor PFI-011 (and variants thereof) as a receptor of adrenic
       acid, and the use of adrenic acid (and analogues or mimetics thereof) as
       modulators for PFI-011. It also relates to screening methods to identify
       agonists and antagonists for this adrenic acid receptor.


=> s l1 and (mast cell? or basophil?)
   5 FILES SEARCHED...
L6           1 L1 AND (MAST CELL? OR BASOPHIL?)

=> d l6 bib ab

L6   ANSWER 1 OF 1  USPATFULL on STN
AN     92:34059  USPATFULL
TI     Chemiluminescence assay of in vivo inflammation
IN     Allen, Robert C., Little Rock, AR, United States
PA     EXOxEmis, Inc., San Antonio, TX, United States (U.S. corporation)
PI     US 5108899              19920428
AI     US 1989-429105          19891031 (7)
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Kepplinger, Esther L.; Assistant Examiner: Wortman,
       Donna C.
LREP   Christensen, O'Connor, Johnson & Kindness
CLMN   Number of Claims: 60
ECL    Exemplary Claim: 1
DRWN   14 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1611
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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AB The presence or amount of in vivo inflammation of a patient is determined by comparing the extent of opsonin receptor expression in vivo on phagocytes of a patient with the maximum opsonin receptor expression inducible on phagocytes of the patient in vitro after stimulation with a receptor expression priming agent. Preferably, the in vivo state of inflammation of a patient is determined by contacting a first portion of a phagocyte containing biological sample from the patient with a opsonified oxidative metabolism stimulating agent capable of elicting metabolic activation and with a chemiluminigenic substrate, contacting a second portion of the biological sample from the patient with an opsonin receptor expression priming agent, an opsonfield oxidative metabolism stimulating agent capable of eliciting metabolic activation and a chemiluminigenic substrate, and then comparing the chemiluminescence response of the first and second portions of the sample as a measure of the immune response potential or state of inflammation of the patient. Phagocyte function is additionally quantitatively evaluated by measuring the phagocyte oxygenation capacity of a maximally opsonin receptor primed and stimulated biological sample of a patient, determining the specific oxygenation capacity per phagocyte in the sample, and comparing the specific oxygenation capacity to a set of controls representing the normal distribution of specific oxygenation established from testing a large population. The phagocyte-specific oxygenation capacity is determined by contacting the sample with an opsonin receptor expression priming agent, an opsonified oxidative metabolism stimulating agent and a chemiluminigenic substrate, measuring the chemiluminescence response of the sample, determining the chemiluminescence response per phagocyte of the sample and comparing the response per phagocyte with that of the normal range of values. Kits and reagents are provided for use in the practice of the disclosed methods.

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=> s l3 and (mast cell? or basophi?)
   5 FILES SEARCHED...
L7          14 L3 AND (MAST CELL? OR BASOPHI?)

=> s l7 and (Immunoglobulin E or IgE)
L8          11 L7 AND (IMMUNOGLOBULIN E OR IGE)

=> s l8 and (IgE(w)receptor? or FcRI or FcRII or CD23 Or CD40)
L9           0 L8 AND (IGE(W) RECEPTOR? OR FCRI OR FCRII OR CD23 OR CD40)

=> s l8 and (IgE receptor)
L10          0 L8 AND (IGE RECEPTOR)

=> s l8 and (receptor?)
L11          5 L8 AND (RECEPTOR?)

=> d l11 1-5 bib ab

L11  ANSWER 1 OF 5  USPATFULL on STN
AN     2003:188407  USPATFULL
TI     Small peptides and methods for treatment of asthma and inflammation
IN     Houck, John C., Seattle, WA, UNITED STATES
       MacDonald, Mary, Lynden, WA, UNITED STATES  LR
PA     Hisatek, LLC (U.S. corporation)
PI     US 2003130200      A1   20030710
AI     US 2002-192000     A1   20020709 (10)
RLI    Continuation of Ser. No. US 1998-189130, filed on 10 Nov 1998, GRANTED,
       Pat. No. US 6462020
PRAI   US 1997-65336P      19971113 (60)
DT     Utility
FS     APPLICATION
LREP   EDWARDS & ANGELL, LLP, P.O. BOX 9169, BOSTON, MA, 02209
CLMN   Number of Claims: 23
ECL    Exemplary Claim: 1
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DRWN 14 Drawing Page(s)
LN.CNT 1469
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition is described as an admixture of a pharmacological carrier and a peptide having the formula **f-Met-Leu-X**. X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr. Also described are methods for inhibiting the degranulation of **mast cells** and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addition, methods are described for inhibiting the release of cytokines in a patient, for inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the production of **IgE** antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical composition.

L11 ANSWER 2 OF 5 USPATFULL on STN
AN 2003:71962 USPATFULL
TI Complexes of alpha-6 integrin subunits with small peptides and methods for treating indications resulting from modulation of integrin-mediated responses by altering signal transduction
IN Clagett, James A., Snohomish, WA, UNITED STATES
Lipani, John, Mountain Hills, AZ, UNITED STATES
Palmer, Craig Robert, San Francisco, CA, UNITED STATES
PI US 2003050249 A1 20030313
AI US 2001-863837 A1 20010523 (9)
PRAI US 2000-206397P 20000523 (60)
DT Utility
FS APPLICATION
LREP Dike, Bronstein, Roberts & Cushman, Intellectual Property Practice Group, Edwards & Angell, LLP, 101 Federal Street, Boston, MA, 02209
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 1457
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for modulating an alpha 6 subunit containing integrin-mediated signal transduction is described. The method involves contacting a cell with an effective integrin modulating amount of an alpha 6 subunit containing integrin-mediated signal transduction pathway modification agent. Preferred agents are peptides having the formula **f-Met-Leu-X**, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

L11 ANSWER 3 OF 5 USPATFULL on STN
AN 2003:17906 USPATFULL
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C., Seattle, WA, UNITED STATES
Clagett, James, Snohomish, WA, UNITED STATES
PA Hisatek, LLC (U.S. corporation)
PI US 2003013658 A1 20030116
AI US 2002-147633 A1 20020516 (10)
RLI Division of Ser. No. US 1998-190043, filed on 10 Nov 1998, GRANTED, Pat. No. US 6391856
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS APPLICATION
LREP DIKE, BRONSTEIN, ROBERTS AND CUSHMAN,, INTELLECTUAL PROPERTY PRACTICE GROUP, EDWARDS & ANGELL, LLP., P.O. BOX 9169, BOSTON, MA, 02209
CLMN Number of Claims: 20
ECL Exemplary Claim: 1

DRWN 18 Drawing Page(s)
LN.CNT 1511
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for treating allergies, cutaneous inflammation, arthritis, chronic obstruction pulmonary disease and treating chronic inflammatory bowel disease are described. Also described is a method for inhibiting the infiltration of eosinophils into airways of a patient, a method for inhibiting the mucous release into airways of a patient, a method for blocking **IgE** activation of a lymphocyte, a method for stabilizing the cell membrane of a lymphocyte, thereby preventing their further involvement in the increased inflammatory response to an **IgE** antigen challenge, and a method for inhibiting the migration of T-cells. Such methods involve administering to said patient a therapeutically effective amount of a peptide having the formula **f-Met-Leu-X**, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

L11 ANSWER 4 OF 5 USPATFULL on STN
AN 2002:262344 USPATFULL
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C., late of Seattle, WA, United States deceased
MacDonald, Mary, Lynden, WA, United States executrix
PA Hisatek, LLC, Seattle, WA, United States (U.S. corporation)
PI US 6462020 B1 20021008
AI US 1998-189130 19981110 (9)
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Borin, Michael
LREP Neuner, George W., Edwards & Angell, LLP Intellectual Property Practice Group
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 26 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1396
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition is described as an admixture of a pharmacological carrier and a peptide having the formula **f-Met-Leu-X**. X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr. Also described are methods for inhibiting the degranulation of **mast cells** and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addition, methods are described for inhibiting the release of cytokines in a patient, for inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the production of **IgE** antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical composition.

L11 ANSWER 5 OF 5 USPATFULL on STN
AN 2002:116255 USPATFULL
TI Method for treatment of allergic reaction using formyl peptide
IN Houck, John C., late of Seattle, WA, United States deceased
Mary MacDonald, United States executor
Clagett, James, Snohomish, WA, United States
PA Histatek, LLC, San Francisco, CA, United States (U.S. corporation)
PI US 6391856 B1 20020521
AI US 1998-190043 19981110 (9)
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS GRANTED

EXNAM Primary Examiner: Borin, Michael
LREP Neuner, George W., Edwards & Angell, LLP
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 26 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1428
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for treating allergies, cutaneous inflammation, arthritis, chronic obstruction pulmonary disease and treating chronic inflammatory bowel disease are described. Also described is a method for inhibiting the infiltration of eosinophils into airways of a patient, a method for inhibiting the mucous release into airways of a patient, a method for blocking **IgE** activation of a lymphocyte, a method for stabilizing the cell membrane of a lymphocyte; thereby preventing their further involvement in the increased inflammatory response to an **IgE** antigen challenge, and a method for inhibiting the migration of T-cells. Such methods involve administering to said patient a therapeutically effective amount of a peptide having the formula **f-Met-Leu-X**, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

=> s l8 and (FcRI or FcRII or CD23 or CD40(w)ligand or CD40L)
L12 0 L8 AND (FCRI OR FCRII OR CD23 OR CD40(W) LIGAND OR CD40L)

=> s l8 and (CD40(w)ligand or CD40L)
L13 0 L8 AND (CD40(W) LIGAND OR CD40L)

=> s l8 and (complement recptor or CR2)
L14 0 L8 AND (COMPLEMENT RECPTOR OR CR2)

=> s l7 and l8
L15 11 L7 AND L8

=> d l15 1-11 bib ab

L15 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:383954 CAPLUS
DN 133:26852
TI Small peptides and methods using them for treatment of asthma and inflammation
IN Houck, John C.; Clagett, James
PA Histatek, LLC, USA
SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000032217	A1	20000608	WO 1998-US25583	19981203
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9918018	A1	20000619	AU 1999-18018	19981203
	EP 1152770	A1	20011114	EP 1998-962874	19981203
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9816097	A	20020122	BR 1998-16097	19981203
	JP 2003504304	T2	20030204	JP 2000-584908	19981203
PRAI	WO 1998-US25583	A	19981203		

AB Methods for treating allergies, cutaneous inflammation, arthritis, chronic obstruction pulmonary disease and treating chronic inflammatory bowel disease are described. Also described is a method for inhibiting the infiltration of eosinophils into airways of a patient, a method for inhibiting the mucous release into airways of a patient, a method for blocking **IgE** activation of a lymphocyte, a method for stabilizing the cell membrane of a lymphocyte, thereby preventing their further involvement in the increased inflammatory response to an **IgE** antigen challenge, and a method for inhibiting the migration of T-cells. These methods involve administering to the patient a therapeutically effective amt. of a peptide having the formula **f-Met-Leu-X**, (X = Tyr, Tyr-Phe, Phe-Phe, Phe-Tyr).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:350603 CAPLUS
DN 130:347411
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C.
PA Hisatek, LLC, USA
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9925372	A1	19990527	WO 1998-US14103	19980707
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2309639	AA	19990527	CA 1998-2309639	19980707
	AU 9884779	A1	19990607	AU 1998-84779	19980707
	EP 1037651	A1	20000927	EP 1998-935561	19980707
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9815288	A	20010213	BR 1998-15288	19980707
	JP 2002516820	T2	20020611	JP 2000-520805	19980707
	US 6391856	B1	20020521	US 1998-190043	19981110
	US 6462020	B1	20021008	US 1998-189130	19981110
	US 2003013658	A1	20030116	US 2002-147633	20020516
	US 2003130200	A1	20030710	US 2002-192000	20020709
PRAI	US 1997-65336P	P	19971113		
	WO 1998-US14103	W	19980707		
	US 1998-189130	A1	19981110		
	US 1998-190043	A3	19981110		

AB A pharmaceutical compn. is described as an admixt. of a pharmacol. carrier and a peptide having the formula **f-Met-Leu-X** (X = Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr). Also described are methods for inhibiting the degranulation of **mast cells** and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addn., methods are described for inhibiting the release of cytokines in a patient, for inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the prodn. of **IgE**

antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical compn.
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 11 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:611123 BIOSIS
DN PREV200200611123
TI Small peptides and methods for treatment of asthma and inflammation.
AU Houck, John C. [Inventor]; MacDonald, Mary [Inventor, Reprint author]
CS Lynden, WA, USA
ASSIGNEE: Hisatek, LLC, Seattle, WA, USA
PI US 6462020 October 08, 2002
SO Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 8, 2002) Vol. 1263, No. 2. http://www.uspto.gov/web/menu/patdata.htm 1. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
ED Entered STN: 27 Nov 2002
Last Updated on STN: 27 Nov 2002
AB A pharmaceutical composition is described as an admixture of a pharmacological carrier and a peptide having the formula **f-Met-Leu-X**. X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr. Also described are methods for inhibiting the degranulation of **mast cells** and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addition, methods are described for inhibiting the release of cytokines in a patient, for inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the production of **IgE** antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical composition.

L15 ANSWER 4 OF 11 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
AN 2002:357108 BIOSIS
DN PREV200200357108
TI Method for treatment of allergic reaction using formyl peptide.
AU Houck, John C. [Inventor, Reprint author]; Clagett, James [Inventor]
CS late of Seattle, WA, USA
ASSIGNEE: Histatek, LLC, San Francisco, CA, USA
PI US 6391856 May 21, 2002
SO Official Gazette of the United States Patent and Trademark Office Patents, (May 21, 2002) Vol. 1258, No. 3. http://www.uspto.gov/web/menu/patdata.htm 1. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
DT Patent
LA English
ED Entered STN: 26 Jun 2002
Last Updated on STN: 26 Jun 2002
AB Methods for treating allergies, cutaneous inflammation, arthritis, chronic obstruction pulmonary disease and treating chronic inflammatory bowel disease are described. Also described is a method for inhibiting the infiltration of eosinophils into airways of a patient, a method for inhibiting the mucous release into airways of a patient, a method for blocking **IgE** activation of a lymphocyte, a method for stabilizing the cell membrane of a lymphocyte; thereby preventing their further involvement in the increased inflammatory response to an **IgE** antigen challenge, and a method for inhibiting the migration of T-cells. Such methods involve administering to said patient a

therapeutically effective amount of a peptide having the formula **f-Met-Leu-X**, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

L15 ANSWER 5 OF 11 USPATFULL on STN
AN 2003:188407 USPATFULL
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C., Seattle, WA, UNITED STATES
MacDonald, Mary, Lynden, WA, UNITED STATES LR
PA Hisatek, LLC (U.S. corporation)
PI US 2003130200 A1 20030710
AI US 2002-192000 A1 20020709 (10)
RLI Continuation of Ser. No. US 1998-189130, filed on 10 Nov 1998, GRANTED, Pat. No. US 6462020
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS APPLICATION
LREP EDWARDS & ANGELL, LLP, P.O. BOX 9169, BOSTON, MA, 02209
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 14 Drawing Page(s)
LN.CNT 1469
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition is described as an admixture of a pharmacological carrier and a peptide having the formula **f-Met-Leu-X**. X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr. Also described are methods for inhibiting the degranulation of **mast cells** and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addition, methods are described for inhibiting the release of cytokines in a patient, for inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the production of **IgE** antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical composition.

L15 ANSWER 6 OF 11 USPATFULL on STN
AN 2003:71962 USPATFULL
TI Complexes of alpha-6 integrin subunits with small peptides and methods for treating indications resulting from modulation of integrin-mediated responses by altering signal transduction
IN Clagett, James A., Snohomish, WA, UNITED STATES
Lipani, John, Mountain Hills, AZ, UNITED STATES
Palmer, Craig Robert, San Francisco, CA, UNITED STATES
PI US 2003050249 A1 20030313
AI US 2001-863837 A1 20010523 (9)
PRAI US 2000-206397P 20000523 (60)
DT Utility
FS APPLICATION
LREP Dike, Bronstein, Roberts & Cushman, Intellectual Property Practice Group, Edwards & Angell, LLP, 101 Federal Street, Boston, MA, 02209
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 1457
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for modulating an alpha 6 subunit containing integrin-mediated signal transduction is described. The method involves contacting a cell with an effective integrin modulating amount of an alpha 6 subunit containing integrin-mediated signal transduction pathway modification agent. Preferred agents are peptides having the formula **f-**

Met-Leu-X, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

L15 ANSWER 7 OF 11 USPATFULL on STN
AN 2003:17906 USPATFULL
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C., Seattle, WA, UNITED STATES
Clagett, James, Snohomish, WA, UNITED STATES
PA Hisatek, LLC (U.S. corporation)
PI US 2003013658 A1 20030116
AI US 2002-147633 A1 20020516 (10)
RLI Division of Ser. No. US 1998-190043, filed on 10 Nov 1998, GRANTED, Pat. No. US 6391856
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS APPLICATION
LREP DIKE, BRONSTEIN, ROBERTS AND CUSHMAN,, INTELLECTUAL PROPERTY PRACTICE GROUP, EDWARDS & ANGELL, LLP., P.O. BOX 9169, BOSTON, MA, 02209
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 1511
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for treating allergies, cutaneous inflammation, arthritis, chronic obstruction pulmonary disease and treating chronic inflammatory bowel disease are described. Also described is a method for inhibiting the infiltration of eosinophils into airways of a patient, a method for inhibiting the mucous release into airways of a patient, a method for blocking **IgE** activation of a lymphocyte, a method for stabilizing the cell membrane of a lymphocyte, thereby preventing their further involvement in the increased inflammatory response to an **IgE** antigen challenge, and a method for inhibiting the migration of T-cells. Such methods involve administering to said patient a therapeutically effective amount of a peptide having the formula **f-Met-Leu-X**, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

L15 ANSWER 8 OF 11 USPATFULL on STN
AN 2002:262344 USPATFULL
TI Small peptides and methods for treatment of asthma and inflammation
IN Houck, John C., late of Seattle, WA, United States deceased
MacDonald, Mary, Lynden, WA, United States executrix
PA Hisatek, LLC, Seattle, WA, United States (U.S. corporation)
PI US 6462020 B1 20021008
AI US 1998-189130 19981110 (9)
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Borin, Michael
LREP Neuner, George W., Edwards & Angell, LLP Intellectual Property Practice Group
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 26 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1396
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A pharmaceutical composition is described as an admixture of a pharmacological carrier and a peptide having the formula **f-Met-Leu-X**. X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr. Also described are methods for inhibiting the degranulation of **mast cells** and for treating inflammation in a patient, for example, where the inflammation is a result of a disease selected from the group consisting of asthma, rheumatoid arthritis and anaphylaxis. In addition, methods are described for inhibiting the release of cytokines in a patient, for

inhibiting the release of histamines in a patient, for inhibiting the release leukotrienes in a patient, for reducing adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation in a patient, for reducing the production of **IgE** antibodies at site of inflammation in a patient, and for inhibiting increased vascular permeability at site of inflammation in a patient. The methods use the described pharmaceutical composition.

L15 ANSWER 9 OF 11 USPATFULL on STN
AN 2002:116255 USPATFULL
TI Method for treatment of allergic reaction using formyl peptide
IN Houck, John C., late of Seattle, WA, United States deceased
Mary MacDonald, United States executor
Clagett, James, Snohomish, WA, United States
PA Histatek, LLC, San Francisco, CA, United States (U.S. corporation)
PI US 6391856 B1 20020521
AI US 1998-190043 19981110 (9)
PRAI US 1997-65336P 19971113 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Borin, Michael
LREP Neuner, George W., Edwards & Angell, LLP
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 26 Drawing Figure(s); 18 Drawing Page(s)
LN.CNT 1428
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for treating allergies, cutaneous inflammation, arthritis, chronic obstruction pulmonary disease and treating chronic inflammatory bowel disease are described. Also described is a method for inhibiting the infiltration of eosinophils into airways of a patient, a method for inhibiting the mucous release into airways of a patient, a method for blocking **IgE** activation of a lymphocyte, a method for stabilizing the cell membrane of a lymphocyte; thereby preventing their further involvement in the increased inflammatory response to an **IgE** antigen challenge, and a method for inhibiting the migration of T-cells. Such methods involve administering to said patient a therapeutically effective amount of a peptide having the formula **f-Met-Leu-X**, wherein X is selected from the group consisting of Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr.

L15 ANSWER 10 OF 11 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 2000-412151 [35] WPIDS
DNC C2000-124935
TI Treating allergies, inflammation (especially of the bowel), arthritis and chronic obstruction pulmonary disease by co-administering a short peptide with anti-leukotrienes, beta2 agonists and corticosteroids.
DC B01 B04
IN CLAGETT, J; HOUCK, J C
PA (HIST-N) HISTATEK LLC; (HIST-N) HISTATEC LLC
CYC 82
PI WO 2000032217 A1 20000608 (200035)* EN 70p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
AU 9918018 A 20000619 (200044)
EP 1152770 A1 20011114 (200175) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
BR 9816097 A 20020122 (200216)
KR 2001108002 A 20011207 (200236)
CN 1341026 A 20020320 (200246)
JP 2003504304 W 20030204 (200320) 75p

ADT WO 2000032217 A1 WO 1998-US25583 19981203; AU 9918018 A WO 1998-US25583 19981203, AU 1999-18018 19981203; EP 1152770 A1 EP 1998-962874 19981203, WO 1998-US25583 19981203; BR 9816097 A BR 1998-16097 19981203, WO 1998-US25583 19981203; KR 2001108002 A WO 1998-US25583 19981203, KR 2001-707005 20010604; CN 1341026 A CN 1998-814393 19981203, WO 1998-US25583 19981203; JP 2003504304 W WO 1998-US25583 19981203, JP 2000-584908 19981203

FDT AU 9918018 A Based on WO 2000032217; EP 1152770 A1 Based on WO 2000032217; BR 9816097 A Based on WO 2000032217; JP 2003504304 W Based on WO 2000032217

PRAI WO 1998-US25583 19981203

AB WO 200032217 A UPAB: 20000725

NOVELTY - Methods (M) (designated (M1)-(M5)) for treating allergies, inflammation (especially of the bowel), arthritis and chronic obstruction pulmonary disease by co-administering a short **N-formyl-methionyl-leucyl** peptide (I) with anti-leukotrienes, beta 2 agonists and corticosteroids, are new.

DETAILED DESCRIPTION - Methods (M) of treating (in mammals) suffering from either:

(1) allergic reactions (M1);

(2) cutaneous inflammation (M2);

(3) arthritis (such as osteoarthritis, psoriatic arthritis, lupus and spondylarthritis) (M3);

(4) chronic obstruction pulmonary disease (M4); and/or

(5) chronic inflammatory bowel disease (M5);

(M) comprises administering the peptide (I).

INDEPENDENT CLAIMS are also included for the following:

(a) a method (M6) for inhibiting the infiltration of eosinophils into the airways of a patient, comprising administering (I);

(b) a method (M7) for inhibiting mucous release into the airways of a patient comprising administering (I);

(c) a method (M8) for blocking immunoglobulin (Ig)-E activation of a lymphocyte, comprising administering (I);

(d) a method (M9) for stabilizing the cell membrane of a lymphocyte to prevent further involvement in increased inflammatory responses to **IgE** antigen challenges, comprising contacting the lymphocyte with (I); and

(e) a method (M10) for inhibiting the migration of T-cells, comprising contacting the T-cells with (I).

f-Met-Leu-X (I)

X = Tyr, Tyr-Phe, Phe-Phe and/or Phe-Tyr.

ACTIVITY - Immunosuppressive; immunomodulatory; antiallergic; cardiovascular; dermatological; anti-psoriatic; antiinflammatory; vulnerary; antiarthritic; pulmonary; gastrointestinal.

MECHANISM OF ACTION - (I) functions by, either:

(i) inhibiting the infiltration of eosinophils into the airways of a patient;

(ii) inhibiting mucous release into the airways of a patient;

(iii) blocking immunoglobulin (Ig)-E activation of lymphocytes;

(iv) stabilizing the cell membranes of lymphocytes to prevent further involvement in increased inflammatory responses to **IgE** antigen challenges; and/or

(v) inhibiting the migration of T-cells (claimed).

(I) acts in the same way as corticosteroids and causes inhibition of **mast cell** degranulation.

Several **f-Met-Leu** peptides were tested for inhibition of induced granulation in a rat skin model using 100 nanomoles of peptide and a test dose of 15 micrograms of compound 48/80. An intrinsic zero-peptide dose 48/80 control was included in each rat for each experiment, and the percentage inhibition was determined in relation to this control (i.e. 0% inhibition). The percentage **mast cell** degranulation produced by 48/80 was also determined.

The peptides **f-Met-Leu**-Phe-Phe and **f-Met-Leu**-Tyr were found to cause 100% and 50% inhibition, respectively.

USE - (M1) is used to treat allergy reactions associated with allergic rhinitis, uticaria, anaphylaxis, drug sensitivity and/or food sensitivity. (M2) is used to treat cutaneous inflammations such as dermatitis, eczema, psoriasis, contact dermatitis, sunburn and/or aging (claimed). (M3) is used to treat arthritis (such as osteoarthritis, psoriatic arthritis, lupus and spondylarthritis). (M4) is used to treat chronic obstruction pulmonary disease and (M5) is used to treat chronic inflammatory bowel disease (claimed).

(I) may also be used to replace corticosteroids in any application in which corticosteroids are used (e.g. immunosuppression in transplant patients and cancer therapy).

Dwg.0/14

L15 ANSWER 11 OF 11 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
AN 1999-370730 [31] WPIDS
DNC C1999-109375
TI Composition containing formyl-methionine peptide.
DC B04
IN HOUCK, J C; CLAGETT, J; MACDONALD, M
PA (HIST-N) HISTATEK LLC; (HISA-N) HISATEK LLC
CYC 84
PI WO 9925372 A1 19990527 (199931)* EN 47p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM GW HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
AU 9884779 A 19990607 (199943)
EP 1037651 A1 20000927 (200048) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
BR 9815288 A 20010213 (200114)
CN 1282253 A 20010131 (200131)
KR 2001032072 A 20010416 (200163)
US 6391856 B1 20020521 (200239)
JP 2002516820 W 20020611 (200253) 47p
US 6462020 B1 20021008 (200269)
US 2003013658 A1 20030116 (200308)
US 2003130200 A1 20030710 (200347)
ADT WO 9925372 A1 WO 1998-US14103 19980707; AU 9884779 A AU 1998-84779 19980707; EP 1037651 A1 EP 1998-935561 19980707, WO 1998-US14103 19980707; BR 9815288 A BR 1998-15288 19980707, WO 1998-US14103 19980707; CN 1282253 A CN 1998-812310 19980707; KR 2001032072 A KR 2000-705194 20000512; US 6391856 B1 Provisional US 1997-65336P 19971113, US 1998-190043 19981110; JP 2002516820 W WO 1998-US14103 19980707, JP 2000-520805 19980707; US 6462020 B1 Provisional US 1997-65336P 19971113, US 1998-189130 19981110; US 2003013658 A1 Provisional US 1997-65336P 19971113, Div ex US 1998-190043 19981110, US 2002-147633 20020516; US 2003130200 A1 Provisional US 1997-65336P 19971113, Cont of US 1998-189130 19981110, US 2002-192000 20020709
FDT AU 9884779 A Based on WO 9925372; EP 1037651 A1 Based on WO 9925372; BR 9815288 A Based on WO 9925372; JP 2002516820 W Based on WO 9925372; US 2003013658 A1 Div ex US 6391856; US 2003130200 A1 Cont of US 6462020
PRAI US 1997-65336P 19971113; US 1998-190043 19981110; US 1998-189130 19981110; US 2002-147633 20020516; US 2002-192000 20020709
AB WO 9925372 A UPAB: 20010312
NOVELTY - Composition contains a peptide (I) that has an N-terminal formyl-methionine residue.

DETAILED DESCRIPTION - (I) are of formula **f-Met-Leu-X**

f-Met = formyl-methionine;

X = Tyr, Tyr-Phe, Phe-Phe or Phe-Tyr.

ACTIVITY - Anti-asthmatic; anti-inflammatory. Mice were sensitized (on day 0) by intraperitoneal injection of ovalbumin (OVA), then challenged (on days 25, 26 and 27) intranasally with OVA, 30 minutes after

intraperitoneal injection of 5 or 10 mg/kg of peptide **f-Met-Leu**-Phe-Phe (Ia). On day 28, bronchoalveolar lavage samples were taken and analyzed for content of eosinophils. The proportion of these cells in the airways was 14.2% in animals treated with (Ia); compared with 44.8% in those given no treatment and 15.8% in those treated with 35 mg/kg of the known lipoxygenase inhibitor N-(1-benzo(b)thien-2-ylethyl)-N-hydroxyurea.

MECHANISM OF ACTION - (I) inhibit **mast cell** degranulation, and thus release of pro-inflammatory mediators. Rats were injected:

(i) into the tail vein with trypan blue, and

(ii) intradermally, on the back, with 0.1 ml of a solution containing 0.15 mu g compound 48/80 (not identified; an inducer of **mast cell** degranulation) and 100 nmoles of (Ia).

After 15 minutes, the animals were killed and an image of the skin from the back digitized with a video camera/computer system to determine the area of capillary permeability (from uptake of the dye). (Ia) provided 100% inhibition of 48/80-induced degranulation; compared with only 30% inhibition using the known compound **f-Met-Leu**-Phe.

USE - (I) are used:

(i) to inhibit degranulation of **mast cells** and release of cytokines, histamine or leukotrienes;

(ii) to reduce adhesion, migration and aggregation of lymphocytes, eosinophils and neutrophils to a site of inflammation;

(iii) to reduce production, or crosslinking, of **immunoglobulin E** at such sites, and

(iv) to increase vascular permeability at these sites.

Specifically (I) are used to treat asthma or inflammation (particularly rheumatoid arthritis and anaphylaxis).

ADVANTAGE - (I) are not chemotactic for lymphocytes, eosinophils or neutrophils and have no toxic effects on heart, liver, lung.

Dwg.0/7

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=> s (IgE recptor)
L16          1 (IGE RECPTOR)

=> d l16 bib ab

L16  ANSWER 1 OF 1  USPATFULL on STN
AN     2002:133851  USPATFULL
TI     Therapeutic uses of LNA-modified oligonucleotides
IN     Orum, Henrik, Vaerlose, DENMARK
       Koch, Troels, Copenhagen, DENMARK
       Skouv, Jan, Espergade, DENMARK
       Jakobsen, Mogens Havsteen, Vanlose, DENMARK
PI     US 2002068709      A1   20020606
AI     US 2000-747913     A1   20001222 (9)
PRAI   US 1999-171873P     19991223 (60)
DT     Utility
FS     APPLICATION
LREP   Dike, Bronstein, Roberts & Cushman, Intellectual Property Practice
       Group, Edwards & Angell, LLP, 130 Water Street, Boston, MA, 02109
CLMN   Number of Claims: 26
ECL    Exemplary Claim: 1
DRWN   3 Drawing Page(s)
LN.CNT 1596
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The invention relates to therapeutic applications of LNA-modified
       oligonucleotides. In particular, the invention provides methods for
       treatment of undesired cell growth as well as treatment of inflammatory
       related diseases and disorders. Preferably, administration of an
       LNA-modified oligonucleotide modulates expression of a targeted gene
       associated with the undesired cell growth or an inflammatory related
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disease or disorder.

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=> s (IgE(w)receptor? or FcRI or FcRII or soluble(w)FcRII)
L17       7353 (IGE(W) RECEPTOR? OR FCRI OR FCRII OR SOLUBLE(W) FCRII)

=> s l15 and l17
L18          0 L15 AND L17

=> s l3 and l17
L19          0 L3 AND L17

=> s l1 and l17
L20          0 L1 AND L17

=> s l17 and (IgE mediated response)
L21         20 L17 AND (IGE MEDIATED RESPONSE)

=> s l21 and l3
L22          0 L21 AND L3

=> s l21 and l1
L23          0 L21 AND L1

=> s l21 and l11
L24          0 L21 AND L11

=> s l21 and (N-formyl-methionyl-leucyl or F-Met-Leu)
L25          1 L21 AND (N-FORMYL-METHIONYL-LEUCYL OR F-MET-LEU)

=> d l25 bib ab

L25  ANSWER 1 OF 1  WPIDS  COPYRIGHT 2004 THOMSON DERWENT on STN
AN   2001-191301 [19]   WPIDS
DNC  C2001-057259
TI   Treating an indication resulting from an IgE-mediated
     response such as acute or chronic asthma comprises administering a
     down-regulating peptide.
DC   B04
IN   CLAGETT, J; CLARGETT, J
PA   (HIST-N) HISTATEK LLC
CYC  92
PI   WO 2001005420 A1 20010125 (200119)* EN   57p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES
            FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
            LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
            TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2000063515 A  20010205 (200128)
     NO 2002000224 A  20020304 (200223)
     BR 2000012495 A  20020611 (200248)
     KR 2002040750 A  20020530 (200276)
     CN 1367700    A  20020904 (200281)
     JP 2003504412 W  20030204 (200320)       57p
     EP 1303290    A1 20030423 (200329)  EN
         R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
     MX 2002000531 A1 20030701 (200366)
ADT  WO 2001005420 A1 WO 2000-US19496 20000714; AU 2000063515 A AU 2000-63515
     20000714; NO 2002000224 A WO 2000-US19496 20000714, NO 2002-224 20020115;
     BR 2000012495 A BR 2000-12495 20000714, WO 2000-US19496 20000714; KR
     2002040750 A KR 2002-700605 20020115; CN 1367700 A CN 2000-811161
     20000714; JP 2003504412 W WO 2000-US19496 20000714, JP 2001-510474
     20000714; EP 1303290 A1 EP 2000-950404 20000714, WO 2000-US19496 20000714;
     MX 2002000531 A1 WO 2000-US19496 20000714, MX 2002-531 20020115
```

FDT AU 2000063515 A Based on WO 2001005420; BR 2000012495 A Based on WO 2001005420; JP 2003504412 W Based on WO 2001005420; EP 1303290 A1 Based on WO 2001005420; MX 2002000531 A1 Based on WO 2001005420

PRAI US 1999-144539P 19990716

AB WO 200105420 A UPAB: 20010405

NOVELTY - A method for treating an indication resulting from an **IgE-mediated response** in a mammal comprises administering to the mammal an IgE downregulating effective amount of a peptide of formula (I).

DETAILED DESCRIPTION - A method for treating an indication resulting from an **IgE-mediated response** in a mammal comprises administering to the mammal an IgE downregulating effective amount of a peptide of formula **N-formyl-methionyl-leucyl**-X (I).

X = Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr

INDEPENDENT CLAIMS are also included for:

(1) downregulating a receptor for IgE comprising administering an **IgE receptor** downregulating amount of (I);

(2) downregulating CD40 ligand, preventing its further involvement in IgE production, comprising administering a CD40 ligand downregulating amount of (I); and

(3) inhibiting IgE secretion by plasma cells comprising contacting the plasma cells with an IgE secretion inhibiting effective amount of (I).

ACTIVITY - Antiasthmatic; antiallergic; immunosuppressive; antiinflammatory; antihistamine.

To establish therapeutic effectiveness of **N-formyl-methionyl-leucyl**-Phe-Phe (HK-X) during the effector phase of bronchial asthma at days 25, 26 and 27 induced by repeated immunization with ovalbumin (OVA) used as a model allergen, doses of 0.1, 1.0, 10 and 50 micro g of intranasal HK-X were administered to acute asthmatic mice. HK-X was administered 30 min before OVA challenge. Control groups consisted of OVA-immunized and OVA-challenged mice as well as animals immunized with Alum in saline and challenged with saline alone. All animals were sacrificed one day after (day 28) the final OVA challenge. Serum IgE levels were determined and serum and lung tissues were collected for further analysis. The most effective dose was 10 micro g administered intranasally compared to lower doses and a higher dose, 50 micro g. Compared to controls, animals treated with 10 micro g of HK-X demonstrated a 60% reduction in serum IgE levels, 50% reduction in cellular infiltration of the lung, 70% reduction in mucus plug formation and 67% reduction in eosinophil number.

MECHANISM OF ACTION - IgE-inhibitor.

USE - (I) is used to treat indications resulting from an **IgE-mediated response** (claimed) e.g. allergic diseases such as asthma. Also useful for downregulating **IgE receptors**, downregulating CD40 ligand and inhibiting IgE secretion by plasma cells (all claimed). (I) is useful for decreasing or preventing release of leukotrienes, histamines and other cytokines and preventing chemotaxis of lymphocytes, esonophils and neutrophils reducing vascular permeability at the inflammation site.

ADVANTAGE - Treats IgE-mediated conditions by modulating IgE levels therefore allowing treatment of a variety of conditions. Prior art techniques focused on treating downstream events caused by IgE meaning different techniques for each condition. No toxicity to vital organs such as heart, liver and lungs is displayed.

Dwg.0/17

=> d his

(FILE 'HOME' ENTERED AT 16:48:56 ON 31 JAN 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, BIOTECHDS, EMBASE, USPATFULL, WPIDS' ENTERED AT 16:49:12 ON 31 JAN 2004

L1 23 S (N-FORMYL-METHIONYL(W)PEPTIDE OR F-MET-X)

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L2          7553 S (N-FORMYL-METHIONYL-LEUCYL OR F-MET-LEU)
L3            17 S L2 AND (F-MET-LEU-X)
L4             0 S L1 AND L3
L5             1 S L1 AND (IMMUNOGLOBULIN E OR IGE)
L6             1 S L1 AND (MAST CELL? OR BASOPHIL?)
L7            14 S L3 AND (MAST CELL? OR BASOPHI?)
L8            11 S L7 AND (IMMUNOGLOBULIN E OR IGE)
L9             0 S L8 AND (IGE(W)RECEPTOR? OR FCRI OR FCRII OR CD23 OR CD40)
L10            0 S L8 AND (IGE RECEPTOR)
L11            5 S L8 AND (RECEPTOR?)
L12            0 S L8 AND (FCRI OR FCRII OR CD23 OR CD40(W)LIGAND OR CD40L)
L13            0 S L8 AND (CD40(W)LIGAND OR CD40L)
L14            0 S L8 AND (COMPLEMENT RECPTOR OR CR2)
L15           11 S L7 AND L8
L16            1 S (IGE RECPTOR)
L17         7353 S (IGE(W)RECEPTOR? OR FCRI OR FCRII OR SOLUBLE(W)FCRII)
L18            0 S L15 AND L17
L19            0 S L3 AND L17
L20            0 S L1 AND L17
L21           20 S L17 AND (IGE MEDIATED RESPONSE)
L22            0 S L21 AND L3
L23            0 S L21 AND L1
L24            0 S L21 AND L11
L25            1 S L21 AND (N-FORMYL-METHIONYL-LEUCYL OR F-MET-LEU)

=> s l11 or l21 and (down regulat? or downregulating)
L26           17 L11 OR L21 AND (DOWN REGULAT? OR DOWNREGULATING)

=> s l26 and (plasma cell?)
   5 FILES SEARCHED...
L27            5 L26 AND (PLASMA CELL?)

=> s L26 and (inhibit?(w)IgE)
L28            8 L26 AND (INHIBIT?(W) IGE)

=> s l27 and l28
L29            1 L27 AND L28

=> d l29 bib ab

L29  ANSWER 1 OF 1  WPIDS  COPYRIGHT 2004 THOMSON DERWENT on STN
AN   2001-191301 [19]   WPIDS
DNC  C2001-057259
TI   Treating an indication resulting from an IgE-mediated
     response such as acute or chronic asthma comprises administering a
     down-regulating peptide.
DC   B04
IN   CLAGETT, J; CLARGETT, J
PA   (HIST-N) HISTATEK LLC
CYC  92
PI   WO 2001005420 A1 20010125 (200119)* EN   57p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES
            FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
            LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
            TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2000063515 A  20010205 (200128)
     NO 2002000224 A  20020304 (200223)
     BR 2000012495 A  20020611 (200248)
     KR 2002040750 A  20020530 (200276)
     CN 1367700    A  20020904 (200281)
     JP 2003504412 W  20030204 (200320)       57p
     EP 1303290    A1 20030423 (200329)  EN
         R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
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MX 2002000531 A1 20030701 (200366)

ADT WO 2001005420 A1 WO 2000-US19496 20000714; AU 2000063515 A AU 2000-63515 20000714; NO 2002000224 A WO 2000-US19496 20000714, NO 2002-224 20020115; BR 2000012495 A BR 2000-12495 20000714, WO 2000-US19496 20000714; KR 2002040750 A KR 2002-700605 20020115; CN 1367700 A CN 2000-811161 20000714; JP 2003504412 W WO 2000-US19496 20000714, JP 2001-510474 20000714; EP 1303290 A1 EP 2000-950404 20000714, WO 2000-US19496 20000714; MX 2002000531 A1 WO 2000-US19496 20000714, MX 2002-531 20020115

FDT AU 2000063515 A Based on WO 2001005420; BR 2000012495 A Based on WO 2001005420; JP 2003504412 W Based on WO 2001005420; EP 1303290 A1 Based on WO 2001005420; MX 2002000531 A1 Based on WO 2001005420

PRAI US 1999-144539P 19990716

AB WO 200105420 A UPAB: 20010405

NOVELTY - A method for treating an indication resulting from an **IgE-mediated response** in a mammal comprises administering to the mammal an IgE **downregulating** effective amount of a peptide of formula (I).

DETAILED DESCRIPTION - A method for treating an indication resulting from an **IgE-mediated response** in a mammal comprises administering to the mammal an IgE **downregulating** effective amount of a peptide of formula N-formyl-methionyl-leucyl-X (I).

X = Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr

INDEPENDENT CLAIMS are also included for:

(1) **downregulating** a receptor for IgE comprising administering an **IgE receptor downregulating** amount of (I);

(2) **downregulating** CD40 ligand, preventing its further involvement in IgE production, comprising administering a CD40 ligand **downregulating** amount of (I); and

(3) **inhibiting IgE** secretion by **plasma cells** comprising contacting the **plasma cells** with an IgE secretion inhibiting effective amount of (I).

ACTIVITY - Antiasthmatic; antiallergic; immunosuppressive; antiinflammatory; antihistamine.

To establish therapeutic effectiveness of N-formyl-methionyl-leucyl-Phe-Phe (HK-X) during the effector phase of bronchial asthma at days 25, 26 and 27 induced by repeated immunization with ovalbumin (OVA) used as a model allergen, doses of 0.1, 1.0, 10 and 50 micro g of intranasal HK-X were administered to acute asthmatic mice. HK-X was administered 30 min before OVA challenge. Control groups consisted of OVA-immunized and OVA-challenged mice as well as animals immunized with Alum in saline and challenged with saline alone. All animals were sacrificed one day after (day 28) the final OVA challenge. Serum IgE levels were determined and serum and lung tissues were collected for further analysis. The most effective dose was 10 micro g administered intranasally compared to lower doses and a higher dose, 50 micro g. Compared to controls, animals treated with 10 micro g of HK-X demonstrated a 60% reduction in serum IgE levels, 50% reduction in cellular infiltration of the lung, 70% reduction in mucus plug formation and 67% reduction in eosinophil number.

MECHANISM OF ACTION - IgE-inhibitor.

USE - (I) is used to treat indications resulting from an **IgE-mediated response** (claimed) e.g. allergic diseases such as asthma. Also useful for **downregulating IgE receptors**, **downregulating** CD40 ligand and **inhibiting IgE** secretion by **plasma cells** (all claimed). (I) is useful for decreasing or preventing release of leukotrienes, histamines and other cytokines and preventing chemotaxis of lymphocytes, esonophils and neutrophils reducing vascular permeability at the inflammation site.

ADVANTAGE - Treats IgE-mediated conditions by modulating IgE levels therefore allowing treatment of a variety of conditions. Prior art techniques focused on treating downstream events caused by IgE meaning different techniques for each condition. No toxicity to vital organs such as heart, liver and lungs is displayed.

Dwg.0/17

```
=> s l27 and (CD40(w)ligand or CD40L)
L30          1 L27 AND (CD40(W) LIGAND OR CD40L)

=> s l28 and (FcRI or FcRII or soluble(w)FcRII)
L31          0 L28 AND (FCRI OR FCRII OR SOLUBLE(W) FCRII)

=> s l28 and (CD40(w)ligand or CD40L)
L32          1 L28 AND (CD40(W) LIGAND OR CD40L)

=> s l30 and l32
L33          1 L30 AND L32

=> d l33 bib ab

L33  ANSWER 1 OF 1  WPIDS  COPYRIGHT 2004 THOMSON DERWENT on STN
AN   2001-191301 [19]   WPIDS
DNC  C2001-057259
TI   Treating an indication resulting from an IgE-mediated
     response such as acute or chronic asthma comprises administering a
     down-regulating peptide.
DC   B04
IN   CLAGETT, J; CLARGETT, J
PA   (HIST-N) HISTATEK LLC
CYC  92
PI   WO 2001005420 A1 20010125 (200119)* EN   57p
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TZ UG ZW
         W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES
            FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
            LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
            TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
     AU 2000063515 A  20010205 (200128)
     NO 2002000224 A  20020304 (200223)
     BR 2000012495 A  20020611 (200248)
     KR 2002040750 A  20020530 (200276)
     CN 1367700    A  20020904 (200281)
     JP 2003504412 W  20030204 (200320)       57p
     EP 1303290    A1 20030423 (200329)  EN
         R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
     MX 2002000531 A1 20030701 (200366)
ADT  WO 2001005420 A1 WO 2000-US19496 20000714; AU 2000063515 A AU 2000-63515
     20000714; NO 2002000224 A WO 2000-US19496 20000714, NO 2002-224 20020115;
     BR 2000012495 A BR 2000-12495 20000714, WO 2000-US19496 20000714; KR
     2002040750 A KR 2002-700605 20020115; CN 1367700 A CN 2000-811161
     20000714; JP 2003504412 W WO 2000-US19496 20000714, JP 2001-510474
     20000714; EP 1303290 A1 EP 2000-950404 20000714, WO 2000-US19496 20000714;
     MX 2002000531 A1 WO 2000-US19496 20000714, MX 2002-531 20020115
FDT  AU 2000063515 A Based on WO 2001005420; BR 2000012495 A Based on WO
     2001005420; JP 2003504412 W Based on WO 2001005420; EP 1303290 A1 Based on
     WO 2001005420; MX 2002000531 A1 Based on WO 2001005420
PRAI US 1999-144539P  19990716
AB   WO 200105420 A UPAB: 20010405
     NOVELTY - A method for treating an indication resulting from an
     IgE-mediated response in a mammal comprises
     administering to the mammal an IgE downregulating effective
     amount of a peptide of formula (I).
          DETAILED DESCRIPTION - A method for treating an indication resulting
     from an IgE-mediated response in a mammal
     comprises administering to the mammal an IgE downregulating
     effective amount of a peptide of formula N-formyl-methionyl-leucyl-X (I).
          X = Tyr, Tyr-Phe, Phe-Phe and Phe-Tyr
          INDEPENDENT CLAIMS are also included for:
          (1) downregulating a receptor for IgE comprising
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administering an **IgE receptor downregulating** amount of (I);

(2) **downregulating CD40 ligand,** preventing its further involvement in IgE production, comprising administering a **CD40 ligand downregulating** amount of (I); and

(3) **inhibiting IgE** secretion by **plasma cells** comprising contacting the **plasma cells** with an IgE secretion inhibiting effective amount of (I).

ACTIVITY - Antiasthmatic; antiallergic; immunosuppressive; antiinflammatory; antihistamine.

To establish therapeutic effectiveness of N-formyl-methionyl-leucyl-Phe-Phe (HK-X) during the effector phase of bronchial asthma at days 25, 26 and 27 induced by repeated immunization with ovalbumin (OVA) used as a model allergen, doses of 0.1, 1.0, 10 and 50 micro g of intranasal HK-X were administered to acute asthmatic mice. HK-X was administered 30 min before OVA challenge. Control groups consisted of OVA-immunized and OVA-challenged mice as well as animals immunized with Alum in saline and challenged with saline alone. All animals were sacrificed one day after (day 28) the final OVA challenge. Serum IgE levels were determined and serum and lung tissues were collected for further analysis. The most effective dose was 10 micro g administered intranasally compared to lower doses and a higher dose, 50 micro g. Compared to controls, animals treated with 10 micro g of HK-X demonstrated a 60% reduction in serum IgE levels, 50% reduction in cellular infiltration of the lung, 70% reduction in mucus plug formation and 67% reduction in eosinophil number.

MECHANISM OF ACTION - IgE-inhibitor.

USE - (I) is used to treat indications resulting from an **IgE -mediated response** (claimed) e.g. allergic diseases such as asthma. Also useful for **downregulating IgE receptors, downregulating CD40 ligand** and **inhibiting IgE** secretion by **plasma cells** (all claimed). (I) is useful for decreasing or preventing release of leukotrienes, histamines and other cytokines and preventing chemotaxis of lymphocytes, esonophils and neutrophils reducing vascular permeability at the inflammation site.

ADVANTAGE - Treats IgE-mediated conditions by modulating IgE levels therefore allowing treatment of a variety of conditions. Prior art techniques focused on treating downstream events caused by IgE meaning different techniques for each condition. No toxicity to vital organs such as heart, liver and lungs is displayed.

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STN INTERNATIONAL LOGOFF AT 17:30:12 ON 31 JAN 2004